

Amendments to the claims:

1. (currently amended) A deck structure comprising:

an underlying deck structure including a plurality of joists;

a plurality of modular building panels, each of said plurality of building panels including a first element being relatively inflexible and of a material selected from among the group including consisting of: stone, mineral, tile, and concrete product, and further including a second element of a fiber-reinforced composite material, said second element being disposed beneath the first element and coupled thereto, said second element supporting the building panel upon two of the plurality of joists, each of said building panels further including at least one groove; and

a spline engaging a pair of grooves of an adjacent pair of building panels, said spline being secured ~~to at least two of the plurality of joists to secure the pair of building panels to the deck structure by threaded fasteners passing through the spline and into at least two of the plurality of joists~~, and said spline having a length substantially greater than a distance between an adjacent pair of joists, whereby the spline spans across more than two joists of the deck structure.

2. (previously amended) A deck structure of claim 1 wherein the first element is adhesively secured to the second element.

3. (currently amended) A deck structure of claim 1 wherein the ~~the~~ first element and the second element are each generally planar.

4. (currently amended) A deck structure of claim 1 wherein the fiber-reinforced composite material includes a material selected from the group including consisting of: KEVLAR fiber, carbon fiber, and fiber glass.

5. (currently amended) A deck structure of claim 4 wherein the composite material further includes a material selected from the group including consisting of: epoxies, resins, and adhesives.

6. (previously amended) A deck structure of claim 1 wherein the spline is aligned generally perpendicular to the joists.

7. (previously amended) A deck structure of claim 1 wherein the spline is aligned generally parallel to a joist.
8. (previously amended) A deck structure of claim 1 wherein the second element includes a rib structure.
9. (previously amended) A deck structure of claim 1 wherein the second element defines an interior region along at least a pair of edges.
10. (previously amended) A deck structure of claim 1 wherein the first element and the second element are equivalent in size.
11. (previously amended) A deck structure of claim 1 wherein the first element and the second element are generally square in shape.
12. (canceled)
- 13-23. (withdrawn)
24. (currently amended) A deck structure comprising:
- a deck frame including a series of joists;
- a plurality of modular panels arranged in a substantially abutting relationship, each panel being of a layered construction including a top element and a bottom element, said top element being of a material providing substantial compressive strength and limited tensile strength, said bottom element being of a fiber-reinforced material, each panel having a groove; and
- a spline engaging a pair of grooves of an adjacent pair of panels, said spline being secured to at least one of the joists by threaded fasteners to secure the pair of panels to the deck frame, and said spline having a length substantially greater than a distance between a pair of joists, whereby the spline element spans across more than two joists of the deck frame.
25. (previously amended) A deck structure according to claim 24 wherein the spline is aligned generally parallel to a joist.

26. (previously amended) A deck structure according to claim 24 wherein the spline is aligned generally perpendicular to a joist.

27. (previously amended) A deck structure according to claim 24 wherein each panel includes a plurality of grooves.

28. (previously amended) A deck structure according to claim 27 wherein each panel is engaged by a pair of splines.

29-40. (withdrawn)

41. (previously amended) A method of building a deck structure comprising the steps of:

providing a deck frame including a series of joists;

providing a plurality of modular panels, each panel being of a layered construction including a top element and a bottom element, said top element being of a material providing substantial compressive strength and limited tensile strength, said bottom element being of a fiber-reinforced material, each panel having at least one groove;

providing an elongated spline element having a length substantially greater than a distance between an adjacent pair of joists, whereby the spline element spans across more than two joists of the deck frame;

placing a row of panels across the series of joists of the deck frame;

inserting the spline element into a groove of each panel of the row of panels; and

securing the spline element to the series of joists to connect each panel to the deck frame.

42. (previously added) A method of building a deck structure of claim 41 further comprising the steps of :

providing a second spline element;

inserting the second spline element into another groove of the panel;

securing the second spline element to one or more joists.

43. (previously amended) A method of building a deck structure comprising the steps of:

providing a deck frame including a series of joists;

providing a plurality of modular panels, each panel being of a layered construction including a top element and a bottom element, said top element being of a material providing substantial compressive strength and limited tensile strength, said bottom element being of a fiber-reinforced material, each panel having at least one groove;

providing a plurality of panel support elements;

attaching the plurality of panel support elements to the series of joists;

providing a spline element;

placing a series of panels upon the plurality of panel support elements;

inserting the spline element into a groove of each of the panels; and

securing the spline element to the series of joists to connect the plurality of panels to the deck frame.

44. (currently amended) An assembly for providing a deck surface for a deck structure having a plurality of generally parallel joists, said assembly comprising:

a plurality of modular building panels, each of said plurality of building panels including a first element being relatively inflexible and of a material selected from among the group including consisting of: stone, mineral, tile, and concrete product, and further including a second element of a fiber-reinforced composite material, said second element being disposed beneath the first element and coupled thereto, said second element supporting the building panel upon two of the plurality of joists, each of said building panels further including at least one groove; and

a spline engaging a pair of grooves of an adjacent pair of building panels, said spline being secured to the plurality of joists by threaded fasteners to secure the pair of building panels to the deck structure, and said spline having a length substantially greater than a distance between an adjacent pair of joists, whereby the spline spans across more than two joists of the deck structure.